WO 2005/102292 PCT/US2004/008768

Claims

15

25

- 1. A chitosan embedded or encapsulated capsule, comprising a chitosan content which is a chitosan, a salt thereof or a derivative thereof, and an edible gum embedding the chitosan content.
- 5 2. The chitosan embedded or encapsulated capsule of Claim 1, wherein the deacetylation degree of the chitosan content is 75% or more.
 - 3. The chitosan embedded or encapsulated capsule of Claim 2, wherein the deacetylation degree of the chitosan content is 90% or more.
- 4. The chitosan embedded or encapsulated capsule of Claim 3, wherein the deacetylation degree of the chitosan content is 95% or more.
 - 5. The chitosan embedded or encapsulated capsule of Claim 1, wherein the molecular weight of the chitosan moiety of the chitosan content is 1,000 to 1,000,000.
 - 6. The chitosan embedded or encapsulated capsule of Claim 5, wherein the molecular weight of the chitosan moiety of the chitosan content is 30,000 to 300,000.
 - 7. The chitosan embedded or encapsulated capsule of Claim 6, wherein the molecular weight of the chitosan moiety of the chitosan content is 100,000 to 200,000.
- 20 8. The chitosan embedded or encapsulated capsule of Claim 1, wherein the average particle size of the chitosan content is in the range of 40 to 50 meshes.
 - 9. The chitosan embedded or encapsulated capsule of Claim 8, wherein the average particle size of the chitosan content is in the range of 60 to 100 meshes.

WO 2005/102292 PCT/US2004/008768

- 10. The chitosan embedded or encapsulated capsule of Claim 9, wherein the average diameter of the chitosan content is in the range of 100 to 150 meshes.
- 11. The chitosan embedded or encapsulated capsule of Claim 1, wherein the amount of the chitosan content is 0.5% to 30% by wet weight of the capsule.
- 5 12. The chitosan embedded or encapsulated capsule of Claim 11, wherein the amount of the chitosan content is 5% to 15% by wet weight of the capsule.
 - 13. The chitosan embedded or encapsulated capsule of Claim 1, wherein the salt of chitosan is an inorganic salt selected from the group consisting of chitosan hydrochloride, chitosan hydrobromide, chitosan phosphorate, and the mixture, or an organic salt selected from the group consisting of chitosan methylate, chitosan ethylate, chitosan propylate, chitosan chloroethylate, chitosan hydroxyethylate, chitosan butylate, chitosan isobutylate, chitosan propenylate, chitosan citrate, chitosan tartrate, and the mixture thereof.

10

20

25

- 15 14. The chitosan embedded or encapsulated capsule of Claim 1, wherein the derivative of chitosan is C_8 - C_{18} N-alkyl or C_8 - C_{18} N-alkanoyl chitosan.
 - 15. The chitosan embedded or encapsulated capsule of Claim 1, wherein the edible gum is selected from the group consisting of locust bean gum, agar gel, sodium alginate, Konjac gum, guar gum, Arabic gum, carrageenan, xanthan gum, pectin, tragacanth gum, gelatin or the mixture thereof.
 - 16. The chitosan embedded or encapsulated capsule of Claim 1, wherein the edible gum is sodium alginate.
 - 17. The chitosan embedded or encapsulated capsule of Claim 1, wherein the amount of the edible gum comprises 0.5% to 5.0% by wet weight of the capsule.
 - 18. The chitosan embedded or encapsulated capsule of Claim 18, wherein the amount of the edible gum comprises 1.0% to 2.0% by wet weight of

WO 2005/102292 PCT/US2004/008768

- 12 -

the capsule.

- 19. The chitosan embedded or encapsulated capsule of Claim 1, wherein the edible gum further comprises, on the basis of the weight of the edible gum, 0.3% to 6% of gelatin and Konjac gum.
- 5 20. The chitosan embedded or encapsulated capsule of Claim 1, further comprising health-enhancing components or food additives.
 - 21. The chitosan embedded or encapsulated capsule of Claim 1, which can effectively reduce the mouth-puckering taste of chitosan.